



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,699	01/19/2005	Zhengwei Wang	21370/0212048-US0	2161

85854 7590 06/04/2009

Huawei Technologies Co., Ltd.
c/o Darby & Darby P.C.
P.O. Box 770
Church Street Station
New York, NY 10008-0770

EXAMINER

D AGOSTA, STEPHEN M

ART UNIT	PAPER NUMBER
----------	--------------

2617

MAIL DATE	DELIVERY MODE
-----------	---------------

06/04/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/521,699	Applicant(s) WANG, ZHENGWEI	
	Examiner Stephen M. D'Agosta	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 11, 14, 16, 18, 20, 23, 25 and 26 is/are rejected.
- 7) ☒ Claim(s) 7-10, 12, 13, 15, 17, 19, 21, 24 and 27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

1. The USC 101 and 112 rejections are overcome based on the amendment.
2. The examiner must give each claim its broadest, reasonable interpretation and notes that the claims don't give details as to WHO or WHEN the markers are defined/setup -- meaning it is assumed that the hardware is delivered and then configured by a tech so that the marker transceivers emit the "information" for the user to receive and configure their device to "trigger" accordingly. Hence, the prior art teaches these basic concepts.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6, 11, 14, 16, 18, 20, 22-23 and 25-26 rejected under 35 U.S.C. 103(a) as being unpatentable over Kuwahara and further in view of Jonsson and Naiki and Beamish.

As per **claims 1 and 25**, Kuwahara teaches a method for performing services by a mobile phone, the method comprising:

~~setting at least one marker module for physical objects desired to be marked, wherein marking information of the marker module itself is stored in said marker module, said marker module can transmit said marking information via a short distance~~

Art Unit: 2617

~~wireless message (Abstract teaches the Base Station transmitting its location to a wireless device);~~

setting/providing a wireless identifier module in the mobile phone, wherein said identifier module can receive the short-distance wireless message transmitted by the marker module (figure 1 shows a wireless device that can receive location information from the BTS, #1) AND said module storing marking information of both said marker module itself and the marked object (Abstract teaches the Base Station transmitting its location to a wireless device);

storing preset entry trigger records in the mobile phone, wherein said entry trigger records comprise a corresponding relationship between a predefined marking information and a predefined entry trigger service (figure 1 shows the wireless device whereby the user can define locations and behavior control of phone, #5. Also see figures 6, 12 and 13 for zones/areas defined and behavior control mapping);

retrieving corresponding marking information from the short-distance wireless message received from any one marker module by said identifier module (figures 6, 12 and 13 show the mapping of the Location vs. Behavior, eg. figure 13 shows HOME, OFFICE, MEETING ROOM, LIBRARY and how the phone will act/behave); and

performing the entry trigger service when the mobile phone determines based on the retrieved marking information that the mobile phone has entered an area marked by said marker module and an entry trigger service corresponding to the retrieved marking information is contained in said entry trigger records, performing the corresponding entry trigger service (figures 6, 12 and 13 show the mapping of the Location vs. Behavior, eg. figure 13 shows HOME, OFFICE, MEETING ROOM, LIBRARY and how the phone will act/behave);

but is silent on the marker module having information of the marked objects and bluetooth.

Kuwahara appears to teach that the BTS just sends location information to the mobile device and the device must determine its current location and if its near a "marked object". The BTS does not appear to send any information about "marked areas" that it is near.

Jonsson teaches "low power registration devices" that transmit signals to a mobile user such that they understand what phone they are near (and a call is routed to said nearby phone). At least Johsson teaches a short-range message/beacon whereby the user can understand what phones they are near.

Furthermore, Naiki teaches a portable phone that can receive a prohibition signal and determine that it should enable/disable operation of transmission functions (Abstract, figures 1-4, C1, L20-50, C7, L60-67). Note that the phone will turn ON when out of range of the short-range transmitter. Also see that he teaches a low-power, short-range transmitter which is shorter range than a BTS – C9, L4-10).

The examiner notes that the prior art all teach generic wireless, short-range networks which inherently reads on WLAN, Bluetooth, Ad hoc, etc.. Nonetheless, the examiner puts forth **Beamish** who teaches a short-range wireless network such as Bluetooth that emits a control signal to a mobile device to command it (eg. to turn it to vibrate in a concert hall, theater, etc., see Abstract, figure 1 and 4, and C1, L5-60 and C2, L1- 32).

It would have been obvious to one skilled in the art at the time of the invention to modify Naiki, such that the transmitter include marker information about the object, to provide means for the mobile to understand what "structure/location" it is near and control the behavior of the phone accordingly.

As per **claim 2**, the combo teaches claim 1, further comprising: - providing preset stay trigger records in the mobile phone, said stay trigger records comprising a corresponding relationship between a predefined marking information and a predefined stay trigger service; performing the corresponding stay trigger service when the mobile phone determines based on the retrieved marking information that the mobile phone has remained in the area marked by said marker module and a stay trigger service corresponding to the retrieved marking information is contained in said stay trigger records, ~~performing the corresponding stay trigger service~~ (Kuwahara teaches having various zones and determining how the phone should behave in said zones, eg. which reads on trigger stays)..

As per **claim 3**, the combo teaches claim 1, further comprising: providing preset exit trigger records in the mobile phone, said exit trigger records comprising a corresponding relationship between a predefined marking information and a predefined exit trigger service; performing the corresponding exit trigger service when the mobile phone determines based on the retrieved marking information that the mobile phone exits the area marked by said marker module and a exit trigger service corresponding to the retrieved marking information is contained in said exit trigger records, ~~performing the corresponding exit trigger service~~ (Kuwahara teaches defined "zones of behavior" for when the phone is within said zone. Thusly the phone must determine if/when the are ENTERING the zone and LEAVING the zone. Naiki appears to teach that the signal strength is used to determine enterin/leaving AND Jonsson teaches the reception of the registration marker information).

As per **claim 4**, the combo teaches claim 2, wherein said stay trigger service may be repeat trigger service performed repeatedly at preset time intervals, or time trigger service performed at preset time (Kuwahara teaches a more "on-demand" service whereby the mobile will perhaps ask for location information from the BTS while Jonsson and Naiki appear to teach more of a periodic broadcast, eg. at regular intervals or continuously, which reads on the claim). See Naiki who teaches preset time/calendar information (C8, L15-45).

As per **claim 6**, the combo teaches claim 1, wherein said area may be a single-marker area marked by a single marker module, or a multi-marker union area or a multi-marker intersection area marked by a plurality of marker modules (Kuwahara teaches the mobile can receive data from AT LEAST one BTS to determine it location or perhaps triangulation can be used whereby multiple BTS's are involved. Jonsson teaches registration deviceS (plural) being located throughout an area (Abstract) hence one skilled would envision that overlap could occur and multiple signals would be received. Naiki teaches receiving at least one enable/disable signal which allows for two proximate transmitters to be near each other, eg. one allowing for OUTSIDE

Art Unit: 2617

operation while the other is located within a building and instructs the phone to disable/vibrate/etc).

As per **claim 11**, the combo teaches claim 1, wherein said services comprises call transfer, incoming call barring, short message service, sleep, awake, alarm clock setting, ring style setting or ring volume setting (the prior art teaches at least Incoming Call Barring, Ring Style setting or Ring Volume – see Kuwahara figure 13 and Naiki's call barring/disablement).

As per **claims 14 and 16**, the combo teaches claim 1, **but is silent on** wherein, after receiving the marking information transmitted from any marker module via its identifier module, if said mobile phone detects that the marker module is a new one, then it executing authentication on the new marker module; if the new marker module passes authentication, the mobile phone further determining whether to trigger corresponding service, otherwise, deeming the marker module is invalid.

The examiner notes that this function is a "security measure" and would be provided by one skilled in order to ensure that the phone's operation is not inhibited by an outside entity who has no right to perform this undesired act.

The examiner takes **Official Notice** that one skilled would provide security measures whereby the markers are registered and can be verified/authenticated such that the mobile's phone will only behave as commanded IF the marker data is authenticated.

It would have been obvious to one skilled in the art at the time of the invention to modify the combo, such that an authentication process is performed, to provide means for security measures being used to ensure the phone is not controlled by an unwanted person/entity/hacker.

With further regard to claim 16, the authenticated marker's command received by the phone would be executed for either a) as long as the user is within the defined area or b) for a pre-set time (as claimed). The reason being that the user may roam into either a) an area that has no specific time limit (eg. in a library, in a meeting, etc..) or

Art Unit: 2617

b) an area that does have a typical time limit (eg. on a train until a certain stop, in a hospital until closing, at home until leave for work M-F, passing thru a toll booth, etc.). See Naiki who also teaches time/calendar limits of operation (C8, L15-34).

As per **claim 18**, the combo teaches claim 1, wherein said marker module further comprises an environment-monitoring module for monitoring environmental parameters; said marking information further comprises the environmental parameters detected by the marker module (See Naiki, C1, L35-40, C7, L1-5 and C7, L60-67).

As per **claims 20 and 23**, the combo teaches claim 1, wherein said marker module broadcasts its essential marking information at preset time intervals, ~~after which is received by the said mobile phone~~ receiving said essential marking information and then sending back a request, said mobile phone then receiving a transmission from said marker module with corresponding detailed marking information based on the sent request (The prior art teaches the mobile receiving the data as it is nears a transmitter. The prior art is interpreted as transmitting/broadcasting the data in such a fashion so as to modify the phone's behavior before it enters into a zone whereby its behavior must change. The manner in which the data is sent, eg. one message or several messages is a design choice, eg. it could be one message or a request/provide protocol whereby the mobile asks for information and then is provided said information by the transmitter, perhaps after being authenticated/verified by said transmitter, etc).

With further regard to claim 23, the combo teaches understanding of the mobile approaching an area where the phone's behavior will be changed and thus the phone can/will stay in that specified behavior until it leaves. The time when and for how long a message (or messages) will be sent to determine if entering/staying/leaving is a design choice since it can be timed or un-timed (as previously discussed in claim 16).

As per **claim 22**, the combo teaches claim 20, wherein said essential marking information is the communication address of the marker module, which may be a static allocated address or a dynamic allocated address (the prior art teaches the transmitter, eg. BTS or registration device or prohibition transmitter, as transmitting “data” regarding the marker and location. Hence the examiner notes that an address can be static or dynamic, eg. similar to TCP/IP addresses which can be static or assigned via DHCP).

The manner in which the location determination is made varies according to the designs of the prior art, eg. it can be a pure location (as per Kuwahara) or a registration device sending information about the location of itself or a prohibition signal that does not have to include the location, just that the phone is commanded ON/OFF). Hence an Address may be provided or not.

As per **claim 26**, the combo teaches claim 25, wherein said wireless identifier module further comprises a transmit module for transmitting a short-distance wireless message to the external marker modules (the prior art of record all teach a mobile use with mobile device. At least Kuwahara teaches a mobile phone interacting with a BTS whereby they can both transmit messages to themselves. The examiner also notes that Jonsson and Naiki both put forth more of a simplex transmission whereby the mobile user/device does not need to interact with the transmitter, hence this is a design choice). NOTE - the claim does not teach what/why the phone is transmitting to the transmitter (eg. it could be a registration message as per cellular operations).

Allowable Subject Matter

Claims 7-10, 12-13, 15, 17, 19, 21, 24 and 27 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 571-272-7862. The examiner can normally be reached on M-F, 8am to 5pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached on 571-272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the EBC at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Stephen M. D'Agosta/
Primary Examiner, Art Unit 2617